APPLICATION FOR A STATE DESIGNATED, FEDERALLY APPROVED NO DISCHARGE AREA FOR THE WATERS IN AND SURROUNDING THE SOUTHERN PORTION OF MOUNT DESERT ISLAND – COASTAL WATERS BETWEEN BASS HARBOR HEAD AND OTTER POINT

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INTRODUCTION

The Maine Department of Environmental Protection (MEDEP), is requesting that the United States Environmental Protection Agency (USEPA) allow the State's designation of the Southern Mount Desert region including the coastal waters Bass Harbor Head and Otter Point as a No Discharge Area (NDA) pursuant to the 33 CFR Part 159 and 40 CFR Part 140. Figure 1 details the geographic extent of the proposed NDA. An NDA is a body of water in which the discharge of vessel sewage, whether treated or not, is prohibited.

The point sources of pollution to the proposed Southern Mount Dessert No Discharge Area (SMDNDA) are well regulated by the Clean Water Act and the State's water quality laws, as well as regulations through the Coast Guard, the MEDEP, and the United State Environmental Protection Agency (USEPA). Maine has begun to address storm water contamination with an aggressive combined sewer overflow abatement plan, the enactment of the Storm water Management Law in 1998, and assumption of the federal stormwater program in 2001 and 2005. The MEDEP continues to identify and eliminate failing or illegal domestic waste water systems that discharge to the water, working closely with local municipal officials and the Department of Marine Resources (DMR). State environmental laws such as the Mandatory Shore land Zoning Act and the Natural Resources Protection Act are designed to control the development of sensitive coastal areas and to limit the amount of non-point source pollution. The state's Small Communities Grant Program (SCGP) funds the repair or replacement of many failing or illegal septic systems every year. Since its beginning in 1982, the SCGP has repaired or replaced approximately 3,500 septic systems throughout the state. The Overboard Discharge Grant Program (ODGP) is designed to eliminate approved discharges to targeted shellfish areas so those areas may be opened for harvesting. Since 1991, the ODGP has removed over 170 overboard discharge systems directly resulting in the opening of 4,500 acres of shellfish harvesting areas.

The proposed SMDNDA is located within the boundaries of the towns of Mount Desert, Southwest Harbor, Cranberry Isles, and Tremont. The MEDEP in conjunction with municipalities and other interest groups have been working hard to reduce pollution going into SMDNDA along Maine's downeast coast and improve water quality in and around harbors, marinas and beaches. Revisions to Maine's Stormwater laws comprehensively address stormwater issues from development. The non-point source management program works through many venues, from flower shows to educate homeowners to contractor training, to educate people on the sources, impacts, and prevention measures for non-point source pollution. In the past 10 years over 37,940 acres of shellfish harvesting area have been opened statewide due to the elimination of landside overboard discharges and malfunctioning septic systems.

However, water quality issues remain including continued bacterial contamination. Sewage discharged from boats contributes to poor water quality, especially in poorly flushed embayments. Between 1970 and 2007, the number of registered boats on the Maine coast more than quadrupled to 65,000. Of the registered boats in coastal waters, it is estimated that approximately 7,000 use marine sanitation devices (MSDs) of some kind. These numbers do not include the significant transient boat traffic estimated to be nearly 8,000 boats per year, almost all of which are cruising boats equipped with MSDs. The percentage of those nearly

15,000 boats that are equipped with holding tanks (MSDIIIs) is unknown but is estimated to be nearly 98% (14,700).

Vessel sewage, like many other pollutants, can be harmful to the environment when it is not adequately treated. Sewage contains a high concentration of nitrogen, a substance that can lead to algal blooms and low dissolved oxygen concentrations that can affect the health of fish, shellfish, and eelgrass beds. Sewage also contains bacteria and viruses that can make shellfish unsuitable for human consumption and make our beaches unsafe for swimming.

Every boat with an installed marine head (toilet) must have a US Coast Guard approved Marine Sanitation Device (MSD). The US Coast Guard tests and certifies MSDs as Type I, Type II, or Type III. A Type I MSD means a device that, under the test conditions, produces an effluent having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible floating solids. A Type II MSD means a device that, under the test conditions produces an effluent having fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter. Type III MSDs are holding tanks designed to prevent the overboard discharge of any sewage, treated or untreated; although, some Type III MSDs are equipped with a "y" valve that allows the operator to legally discharge stored sewage once the vessel is more than 3 miles offshore. Boats larger than 65 feet in length must use a Type II or Type III MSD, while boats under 65 feet can use a Type I, II or III MSD.

While Type I and Type II MSDs are designed to treat vessel sewage, they do not remove significant amounts of nitrogen from the waste before it is discharged. They also cannot remove all of the bacteria or viruses. Certain waters of high public and environmental value that require greater environmental protection than under existing laws, can be designated NDAs under the federal Clean Water Act. Because there is a risk that sewage may negatively impact these sensitive areas, all vessel sewage, even if treated by a Type I or Type II MSD, is prohibited from being discharged in NDAs.

As a result, the MEDEP feels it is appropriate to request designation of Southern Mount Desert region as a No Discharge Area. The area to be included in the designation includes all contiguous navigable waters. For a detailed description see Table 1.

Table 1.

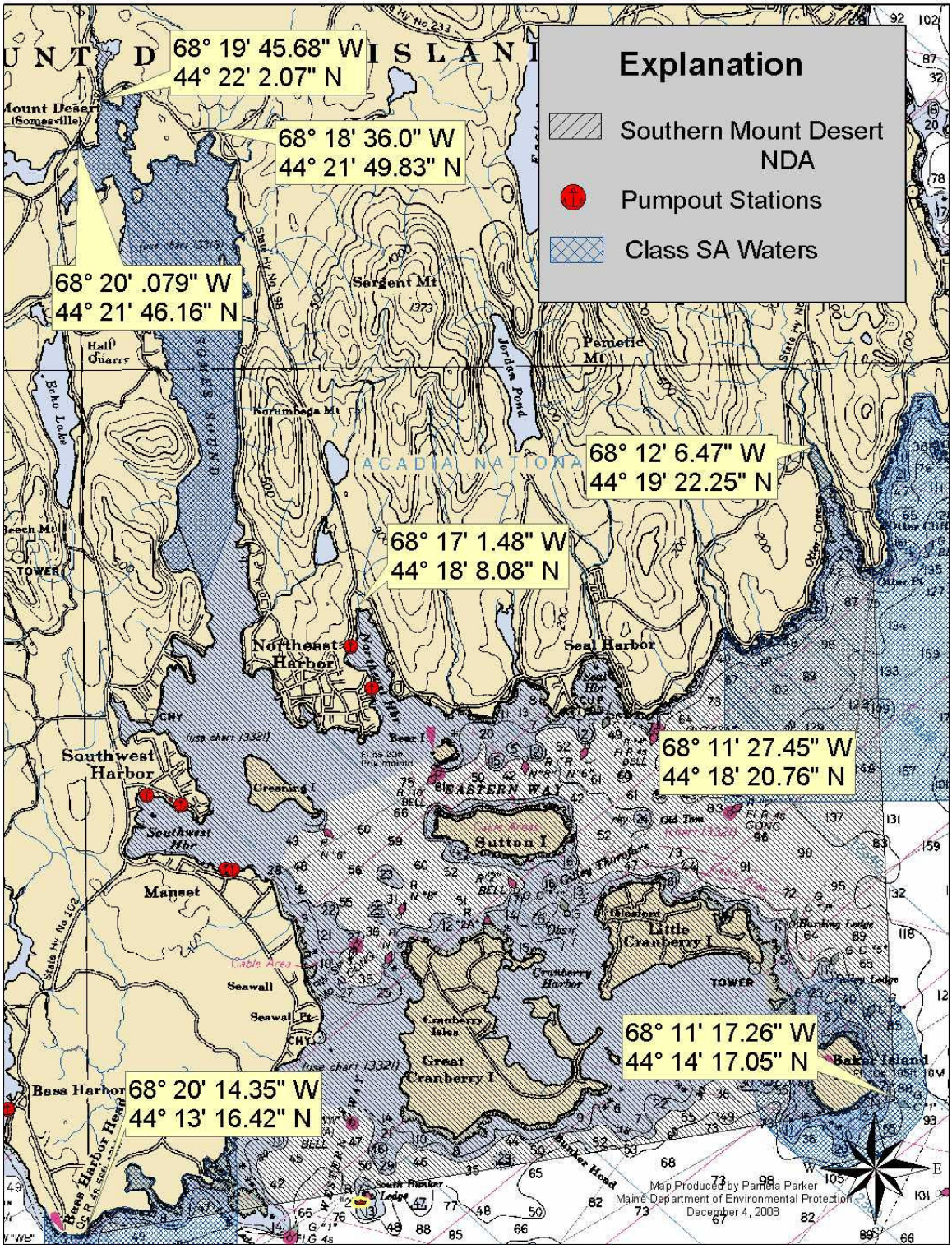
DESCRIPTION:

Waterbody/General Area	From Longitude	From Latitude	To Longitude	To Latitude
From “Bass Harbor Head” in Tremont north following the shore to the bridge over the outlet stream of “Somes Pond” in Mount Desert:	68° 20' 14.35” W	44° 13' 16.42" N	68° 20’ 0.79” W	44° 21’ 46.16” N
Northeast following the shore to the bridge over “Kitteridge Brook” in the northern most portion of “Somes Harbor” in Mount Desert:	68° 20’ 0.79” W	44° 21’ 46.16” N	68° 19' 45.68” W	44° 22' 2.07" N
East following the shore to the head of “Somes Sound” in Mount Desert:	68° 19' 45.68” W	44° 22' 2.07" N	68° 18’ 36.0” W	44° 21’ 49.83” N
South following the shore to the northern most portion of “Northeast Harbor” in Mount Desert:	68° 18’ 36.0” W	44° 21’ 49.83” N	68° 17’ 1.48” W	44° 18’ 8.08” N
East following the shore to the northern most head of “Otter Cove” in Mount Desert:	68° 17’ 1.48” W	44° 18’ 8.08” N	68° 12’ 6.47” W	44° 19’ 22.25” N
South following the shore to “Otter Point” in Mount Desert:	68° 12’ 6.47” W	44° 19’ 22.25” N	69° 11' 27.45" W	44° 18' 20.76" N
South in a straight line across the water to navigational marker C ”1” off “Baker Island” in Cranberry Isles:	69° 11' 27.45" W	44° 18' 20.76" N	68° 11' 17.26" W	44° 14' 17.05" N
West in a straight line across the water to “Bass Harbor Head” in Tremont.	68° 11' 17.26" W	44° 14' 17.05" N	68° 20' 14.35” W	44° 13' 16.42" N

The boundaries were chosen based on easy line-of-sight locations and generally represent all navigational waters. See Figure 1

Figure 1.

Southern Mount Desert No Discharge Area Boundary and Pumpout Station Locations



CERTIFICATION OF NEED

The proposed SMDNDA coastal area constitutes almost 25 square miles of marine habitat. The intertidal zone includes a diverse array of habitats from rocky shore to large amounts of wetlands and salt marshes and flats. Due to topography and wide tidal variations characteristic of the Gulf of Maine, intertidal areas in Maine are the most extensive along the Atlantic Coast of the United States. Rocky shoreline predominates the region, but there are a number of significant salt marshes and mud flats in SMDNDA. In the proposed NDA over there are over 4000 acres of wetlands.

The majority of the wetlands are located in and around Great Cranberry Island and Islesford. The wetlands are comprised of fringing wetlands and several large salt marshes. Tidal salt marshes are great primary producers. Terrestrial birds shorebird, shellfish and invertebrates, thrive off the oxygen these marshes give to their surrounding habitats. Specific species are habitat dependent upon salt marshes. They include amphipods, snails and ribbed mussels. Salt marshes also have the ability to support rare plants in some parts of Maine. Water quality alterations can have a profound negative affect on these marshes which can in turn weaken marsh systems.

There are a number of small mud flats in the SMDNDA. Flats are particularly important environments because they support a rich and abundant animal community. Changes in water quality from point and non-point sources of pollution can dramatically negatively affect mud flats, by changing community of animals which live in the substrate of a body of water, often on the ocean floor. Shorebirds, waterfowl, and wading birds feed on flats and in the creeks and shallow subtidal areas near flats and the open waters. The Maine DMR has recorded salt marshes and mud flats as being critical feeding grounds for many species of migrating and resident shorebirds.

A significant amount of the SMDNDA is identified as a High Value Wildlife Habitat by the US Fish and Wildlife Service. Besides providing feeding habitat for raptors such as falcons, hawks and eagles, there are shorebird roosting and feeding areas as well as tidal waterfowl and wader habitat. Waterfowl including many species of ducks and geese, loons, six species of heron, two species of egrets and glossy ibis frequent this area. The SMNDA contains the essential habit for bald eagles which are listed as threatened by the state of Maine.

From an economic standpoint, the shellfish harvesting areas are an important and valuable resource. However, 87% of the total resource is closed to shellfish harvesting due to actual or threatened bacterial contamination. Designation of the area as a NDA will facilitate greater control over vessel based sources of pollution, potentially opening 50% of the area currently closed to shellfish harvesting.

Water Quality

The waters contained within the SMDNDA are classified under Maine's water classification program and Class SB and Class SA. Class SB waters are suitable for recreation in and on the water, fishing, and aquaculture and are generally defined as being unimpaired. Class SA waters are the highest classification of marine and estuarine waters in the state and constitute waters that are outstanding natural resources and which are worthy of preserving because of their ecological, economic and recreational importance. The SMDNDA contains roughly 8 square miles of class SA waters including: the majority of Somes Sound, New England's only marine fjord; all the waters surrounding Baker island, part of Acadia National Park; and the waters abutting other portions of the park including Bass Harbor head and Otter Cove. By

classifying a number of waters as Class SA, the MEDEP demonstrated the pristine quality, value, and unique nature of these waters to the state legislature. Under State law, discharges are prohibited to Class SA waters. By including these waters and much of the waters surrounding them in the proposed NDA, the MEDEP will make the state and federal laws consistent, further protecting the waters. All Class SA waters are identified in Figure 1.

Recreational

The SMDNDA is adjacent to and bordered by Acadia National Park, the most popular tourist location in the state. With over 2 million park visitors annually, Acadia is a significant draw to the area. The public accessibility of the park and the outstanding natural resources outside the park make the SMDNDA a very popular destination for sea kayakers, bird watchers and outdoor enthusiasts or all types. Acadia National Park controls roughly 1/3 of the total shoreline of the SMDNDA including several of the islands within the NDA. Both of Acadia's public campgrounds, Seawall and Blackwoods are located adjacent to the NDA with the campsites being a short 10 minute walk from the ocean waters contained within the NDA. In addition, there are 14 private campgrounds located on Mount Desert Island.

There are 2 large marinas in Southwest Harbor and large boating complex managed by the Town of Mount Desert in Northeast Harbor, together serving roughly 992 boats. There are a number of smaller harbors and coves in Mount Desert including the Northeast Harbor Fleet anchorage and Seal Harbor that were included in the total boat count for the town of Mount Desert rather than being broken out individually. The Town of Cranberry Isles, though predominantly a working community, does have a number of recreational vessels and is included in Table 3. There are 2 active sailing clubs that run regular sailing classes and races within the SMDNDA. Due to the area's scenic location, boating facilities, and on-shore attractions, it is a very popular destination for transient and local boaters alike.

Scenic boat tours and ferry service to the islands run out of Northeast Harbor and Southwest Harbor and boat rentals are available from two different businesses in Southwest Harbor. Beal and Bunker operates two vessels for the daily, year round, mail boat and ferry service to the Cranberry Isles out of Northeast Harbor. The Cranberry Cove Ferry Service operates one vessel out Southwest Harbor servicing the Cranberry Isles and Sutton Island as well. Both ferry services double a scenic tour boats in their normal operations. Maine State Sea Kayak guide service also operates out of Southwest Harbor, normally offering four half day tours that are conducted almost entirely within the waters of the proposed NDA. See Figure 4 for recreation areas.

Figure 2.

Southern Mount Desert NDA
Bird and Wildlife Resources

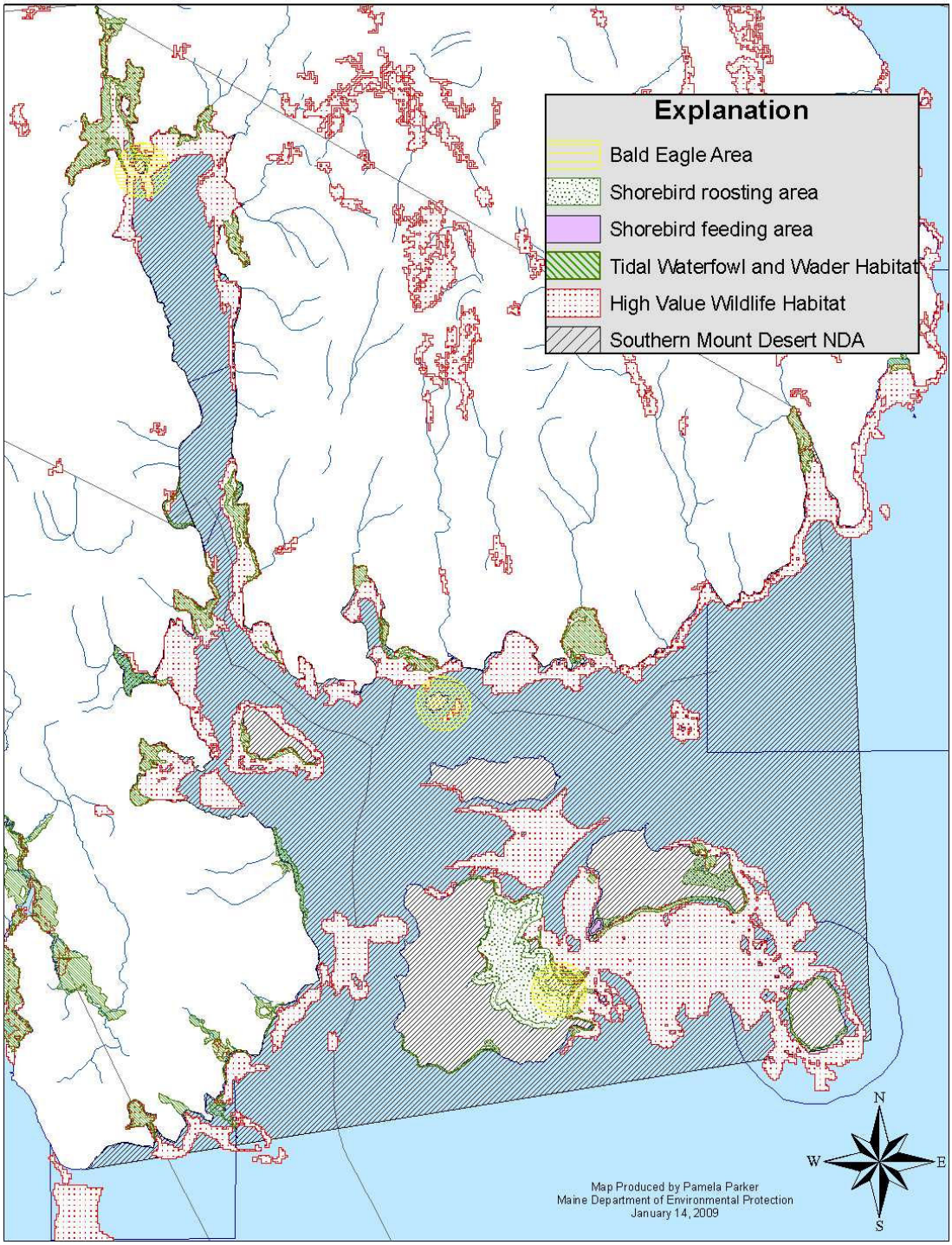


Figure 3.

Southern Mount Desert NDA
Submerged and Wetlands Resources

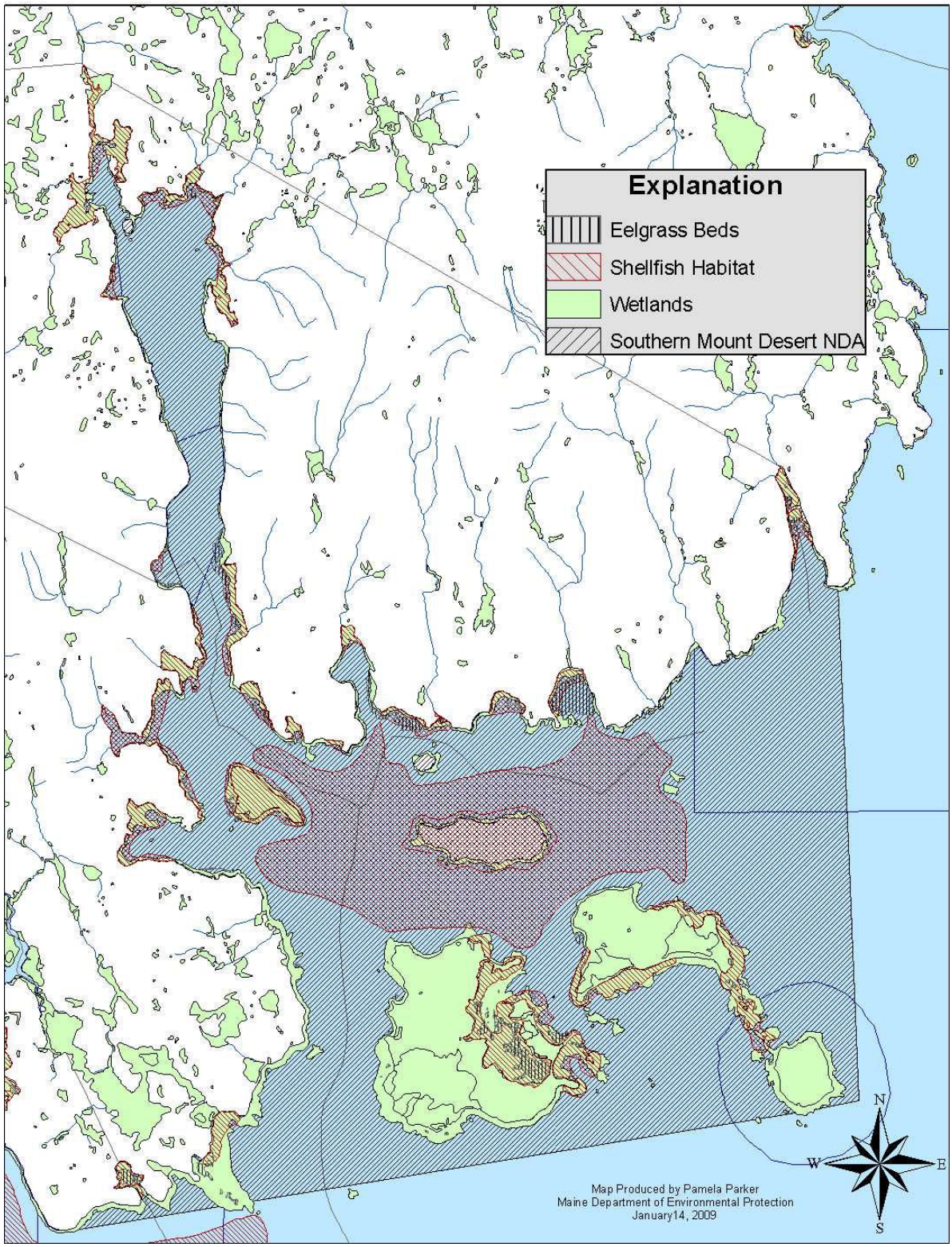
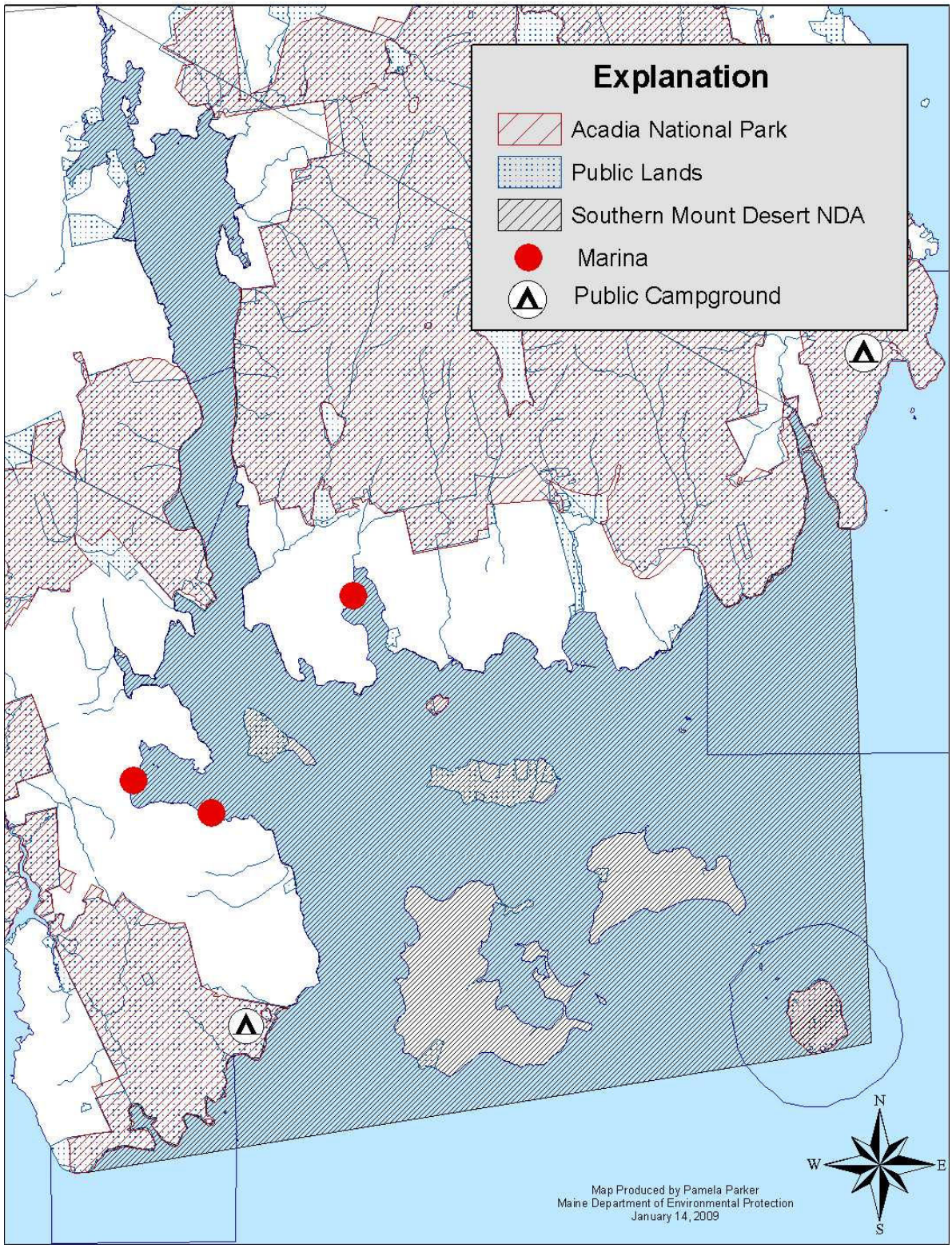


Figure 4.

Southern Mount Desert NDA
Recreation Resources



PUMPOUT FACILITIES

Background

Since 1993, Maine has worked toward increasing the availability of boat pump-out stations along the coast and increasing the public's awareness of the facilities through the Federal Clean Vessel Act funding. Until 1998, the grants were administered by the State Planning Office (SPO). Starting in 1999, the grant program has been administered by the MEDEP.

The MEDEP has been successful in a number of ways but there is plenty of work yet to be done due to rapidly increasing recreational boat traffic along the coast. The state has tripled the number of pump-outs available on the coast and, through education and outreach materials, has increased the level of pump-out use throughout the coast.

In 2000, MEDEP compiled an inventory and ranked all the roughly 350 navigable harbors in the state according to the number of boats normally sheltered, the harbor flushing capability, the presence of sensitive habitats, and the presence or absence of other known sources of pollution. After ranking, the MEDEP identified the top 100 as "significant" or "priority" harbors. After reviewing the pumpout priority list and discussing the feasibility of pumpout installation in some more remote areas of the coastline, *the MEDEP has concluded that the pumpout station goal should be to have pumpout within 4 miles of all the priority harbors*. Achieving this goal would ensure that a pumpout station is within one hour of all the significant harbors in the State.

As a tool for pumpout station installation, MEDEP has 38 M.R.S.A. §423-B. This section of law requires coastal marinas over a certain size to have operational pumpouts. All coastal marinas having a total of 18 or more slips and/or moorings for boats greater than 24 feet in length meet the threshold for pumpout requirement. All facilities that have installed a pumpout system and are subject to §423-B are also required to maintain their system in good working order. Facilities with pumpouts that are not subject to the requirements of §423-B but have received grant funds for their pumpout system are required to maintain their systems or refund a portion of the grant money they received. Since 2001, the MEDEP has conducted regular annual inspections of all pumpout systems to ensure that they function properly.

PUMPOUT FACILITIES

A. Location

There are 6 pumpout stations serving boaters in the SMDNDA. They are located at the municipal dock and Clifton Dock in Northeast Harbor and the Hinckley Company, Great Harbor Marina, Southwest Boat Maine Service pier and the Downest Diesel and Marine dock. All the locations discharge to town sewer systems either via a direct connection or by an operator moving the portable unit to a sewer manhole and pumping the tank into the sewer manually. The location of the pumpout stations can be found on Figure 1.

B. Accessibility

Operating hours, contact information, pumpout system type, boat height and depth limitations are noted in Table 1. For the most part, pumpout facilities in the SMDNDA are accessible and functional at high and low tides and have little to impede tall vessels. Commercial passenger vessels normally use the municipal dock in Northeast Harbor, where a number of them berth overnight, or the Hinckley Company whose long dock face and depth can accommodate vessels up to 90'. Fishing vessels, if equipped with an MSD, can be serviced at any of the locations.

C. Vessel population and usage

Data used in this application were collected through harbormaster boat registries as reported through a standard survey form and were confirmed by analysis of aerial photography conducted by MEDEP Staff. The harbor master data was expected to be the most representative of the normal conditions in the harbors. Any differences among the data sets can be attributed to seasonal and yearly fluctuation.

Recreational Vessels

In the SMDNDA there are roughly 864 recreational vessels with the majority being located in the town of Southwest Harbor. The vessels appear to be privately owned recreational craft, ranging from under 16' to a number of large yachts well over 40 feet. Most of the recreational vessels in the town of Southwest Harbor are located at the marinas or moored in the large mooring field in Southwest Harbor proper including the eastern portion of the harbor referred to as Manset. There are two additional two small anchorages, the first located between Greening Island and Clark Point and the second in Norwood Cove. All anchorages have been included in the vessel counts for the town of Southwest Harbor. A summary of all the recreational vessels in Southwest Harbor can be found in Table 3.

The recreational vessels located in the Town of Mount Desert are located in 4 anchorages, the largest being Northeast Harbor, followed by Seal Harbor, the small cove locally referred to as Northeast Harbor Fleet, and finally the northern portion of Somes Sound including Somesville Harbor. Otter Cove, surrounded entirely by Acadia National Park and being exposed to the prevailing seas, is not generally used as an anchorage. A summary of all the recreational vessels in Mount Desert can be found in Table 3.

The vessels in Cranberry Isles are located in Hadlock Cove off of Islesford, and a cove off the north end of Great Cranberry Island. There are no significant anchorages off either Sutton or Baker Islands. A summary of all the recreational vessels in Cranberry Isles can be found in Table 3.

Table 2. Pumpout Station Location and Accessibility

Town	Name	PO Type	Phone	Hours of Operation	VHF	Address	MLW Depth/ Length & Hight Restrictions	Disposal	Fee/ Funding
Mount Desert	Harbormaster (town)	Stationary	207 276-5737	8-5 7 days/ week	16	18 Harbor Drive	10 ft None	Sewer	$5 Public
Mount Desert	Clifton Dock	35-gal cart	207 967-2511	8-5, 7 days/ week	9	Clifton Dock Road	10 ft None	manually discharged to sewer	$5 Public
Southwest Harbor	Hinckley Company	Stationary	207 244-5572	8-5, 7 days/ week	9	130 Shore Road	20 ft None	Sewer	$5 Public
Southwest Harbor	Great Harbor Marina	Stationary	207 244-0117	9-5, 7 days/ week	9	11 Apple Lane	10 ft None	Sewer	$5 Public
Southwest Harbor	Southwest Boat Marine Service	28 gal cart	207 244-5525	9-5 M-F	9	168 Clarke Point Road	8 ft None	manually discharged to sewer	$5 Public
Southwest Harbor	Downeast Diesel and Marine	28 gal cart	207 244-5145	9-5 M-F	9	174 Clarke Point Road	8 ft None	manually discharged to sewer	$5 Public

Table 3. Recreational Vessel Counts, Lengths, and Location

Boat Lengths in Mount Desert	Boat Length				Total #
	< 16'	16' – 25'	26' – 40'	> 40'	
Moored	20	25	26	25	96
Docked	20	30	16	11	77
Transient	40	16	50	12	118
Total:	80	71	92	48	291

Boat Lengths in Southwest Harbor	Boat Length				Total #
	< 16'	16' – 25'	26' – 40'	> 40'	
Moored	54	135	67	5	261
Docked	38	45	18	12	113
Transient	12	22	23	19	76
Total:	104	202	108	36	450

Boat Lengths in Cranberry Isles	Boat Length				Total #
	< 16'	16' – 25'	26' – 40'	> 40'	
Moored	23	38	14	2	77
Docked	42	3	1	0	46
Transient	0	0	0	0	0
Total:	65	41	15	2	123

Commercial Vessels

Based on harbor master data and visual counts there appear to be 128 commercial vessels in the SMDNDA consisting of ferry boats, and a tour boat, the remaining majority of the total being commercial fishing vessels. As noted before, there are two regular ferry services operating 3 vessels servicing the SMDNDA, as well as one other regular tour boat. The ferries conduct 3-15 scheduled trips per day depending on the season. The tour boat normally offers four trips per day. There are several sailing vessel boat tours available in both Southwest and Northeast Harbors with variable schedules depending on customers and weather. In addition, the Delight Water Taxi provides seasonal 24 hour ferry service to all locations within the proposed NDA on demand. The Maine Seacoast Mission operates their vessel out of Northeast Harbor providing health services and spiritual support to the islands. The United States Coast Guard operates a number of vessels out of Clarke Point station in Southwest Harbor.

The fishing vessels are predominantly lobster boats, the larger of which may be converted to other tackle during certain times of the year. There may be several charter fishing vessels but

their numbers could not be verified. Cranberry Isles has most commercial vessels even though it has the smallest total vessel count. Table 4 provides the size breakdown of commercial vessels in the SMDNDA.

All ferries and most excursion boats over 25 feet have heads on board and Type II or Type III MSDs. The presence of heads on fishing boats is variable, but for the purposes of this application MEDEP is assuming all commercial fishing boats are equipped with heads. This is probably a significant over estimate because, according to data provided by the Maine Lobsterman's Association, less than 10% of all lobster boats are equipped with installed heads or porta-potties.

Table 4. Commercial Vessel Counts, Lengths, and Location

Boat Lengths in Mount Desert				**Total #**
< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	
0	20	8	1	29
Boat Lengths in Southwest Harbor				**Total #**
< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	
0	12	23	12	47
Boat Lengths in Cranberry Isles				**Total #**
< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	
10	15	23	4	52

All commercial vessels can easily access the Mount Desert municipal dock, Great Harbor Marina and the Hinckley Company facilities. The US Coast Guard vessels discharge to the sewer via direct connection.

Vessels with Heads and MSDs

Table 5 details the total number of recreational and commercial vessels expected to have heads and, consequently, MSDs. The calculations used to determine number of vessels with MSDs was based on data developed by the Urban Harbors Institute with the exception of anomalous data in the under 16 foot range due to survey ambiguity. For the purposes of this application, MEDEP will use the following percentages and will assume that all vessels with heads are equipped with an MSD.

0% of vessels less than 16' had MDSs
12% of vessels 16-25' have MSDs
86% of vessels 26-40' have MSDs and
95% of vessels over 40' have MSDs.

Table 5. Estimated Total Vessels with MSDs

	Estimated Number of Vessels with MSDs in Mount Desert				
	< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	**Total**
Total Boats	80	91	100	49	320
Estimated # without heads	80	80	14	2	176
Estimated # with heads	0	11	86	46	143

	Estimated Number of Vessels with MSDs in Southwest Harbor				
	< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	**Total**
Total Boats	104	214	131	48	497
Estimated # without heads	104	188	18	2	312
Estimated # with heads	0	26	113	46	185

	Estimated Number of Vessels with MSDs in Cranberry Isles				
	< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	**Total**
Total Boats	75	56	38	6	175
Estimated # without heads	75	49	5	0	124
Estimated # with heads	0	7	33	6	46

In order to provide some estimation of the number of vessels that may need to be converted to Type III MSDs from their existing Type I or Type II, MEDEP used information from the Casco Bay No Discharge Area boater survey conducted in 2007 which found that 98% of vessels with heads were equipped with a Type III MSD. The results of these calculations can be found in Table 6.

Table 6. Estimated Total Number of Type III MSDs

	Total Boats in the SMDNDA				Total #
	< 16'	**16' – 25'**	**26' – 40'**	**> 40'**	
Total Boats with Heads	0	44	232	98	374
Estimated # of Type I and II MSDs	0	1	5	2	8
Estimated # of Type III MSDs	0	43	227	96	366

Based on these calculations there are approximately 374 boats with MSDs in the SMDNDA and 366 of those already have a Type III MSD. Using only the three stationary pumpout stations, the ratio of pumpout stations to vessels is 1:125, well within the USEPA guidelines. The addition of the pumpout caddys only makes the ratio more favorable. Therefore, the MEDEP concludes that there is adequate pumpout station capacity to service all the vessels of the SMDNDA. If any areas appear to be underserved, MEDEP will work with the community to improve pumpout capability. Further, it appears that the burden of vessel conversion to a Type III MSD will be minimal to the local boaters.

PUBLIC EDUCATION AND ENFORCEMENT

Education and enforcement plays an important role in the successful implementation of an NDA. The prohibition on discharging boat sewage in an NDA applies to all vessels, commercial and recreational, regardless of the Type of MSD on board. Information on and enforcement of federal laws related to MSDs is the responsibility of the US Coast Guard. States also have the authority to enforce the prohibition of vessel sewage discharges in NDAs, pursuant to 33 CFR Part 159. In the State of Maine the Maine Marine Patrol, part of the Department of Marine Resources, the Maine Wardens Service, part of the Department of Conservation, the State Police and some harbormasters have enforcement authority for watercraft.

MEDEP produces a pumpout brochure annually that identifies all the pumpout locations along the coast. These pamphlets are distributed to all facilities with pumpout stations along with other boatyards and marinas. The MEDEP allocates at least $7500 a year from the Clean Vessel Act Grant to education and outreach efforts.

MEDEP will work with municipalities and marinas to provide and install adequate signage informing boaters of the NDA and will provide template language to help marinas and boatyards communicate the requirements to their customers. Further, the MEDEP will conduct direct mailings to registered boat owners in the towns surrounding the NDA. Cruising guides, local newspapers and boating magazines will all be informed of the changes with press releases and regular advertisements.

Prior to implementation of the NDA and then after the first year of the NDA, MEDEP plans to conduct an informal survey during the following boating season to determine the level of awareness among the boating public. Based on the results of the survey, Maine DEP will either perform additional outreach efforts targeted at the populations that seem to be less informed or will proceed with a small targeted enforcement project in cooperation with the local harbor master, the Marine Patrol and the Coast Guard. The purpose of the targeted enforcement project will be to 1) determine compliance trends and 2) get the word out that the NDA will be enforced 3) refine enforcement tools and methods. The enforcement team will try a variety of methods including boarding and inspection (particularly for resident boats in slips), and dying heads and holding tanks. The results of the enforcement project will be publicized with a press release and further public education efforts. Based on the indication of overall compliance revealed in the project the DEP will create an overall enforcement strategy that is reasonable and implement able on the local level.

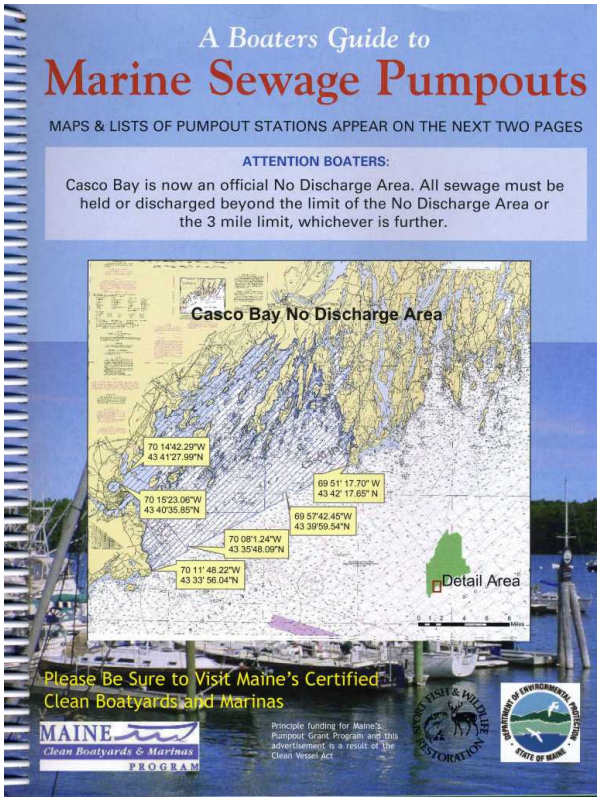
References

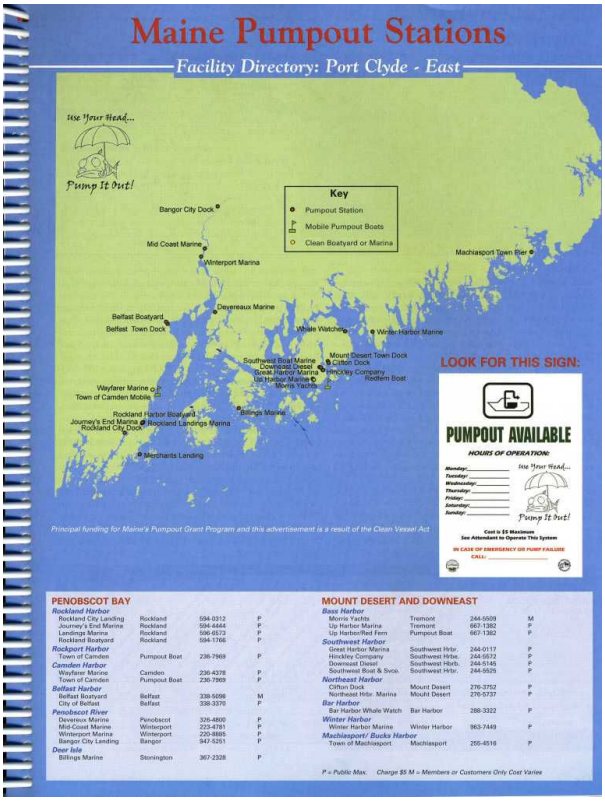
"South Shore Pumpout Evaluation & Outreach Plan", Urban Harbors Institute and North & South Rivers Watershed Association, Boston, MA, June 2004

This report is available online at www.uhi.umb.edu

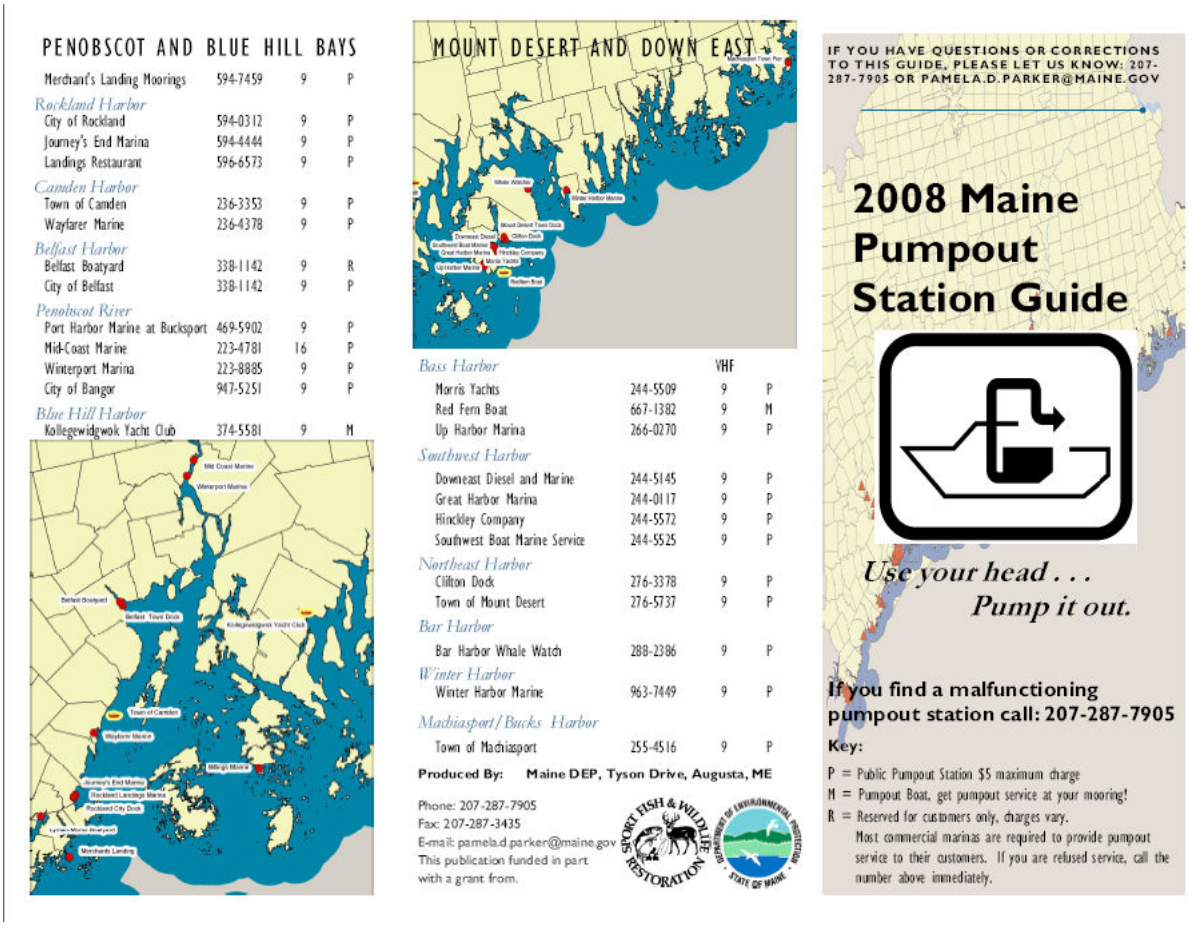
APPENDIX A
Sample Educational Materials

Maptech Embassy Cruising Guide to the New England Coast 7th Edition 2007





Maine Pumpout Guide Published Annually



PENOBSCOT AND BLUE HILL BAYS

Merchant's Landing Moorings	594-7459	9	P
Rockland Harbor			
City of Rockland	594-0312	9	P
Journey's End Marina	594-4444	9	P
Landings Restaurant	596-6573	9	P
Camden Harbor			
Town of Camden	236-3353	9	P
Wayfarer Marine	236-4378	9	P
Belfast Harbor			
Belfast Boatyard	338-1142	9	R
City of Belfast	338-1142	9	P
Penobscot River			
Port Harbor Marine at Bucksport	469-5902	9	P
Mid-Coast Marine	223-4781	16	P
Winterport Marina	223-8885	9	P
City of Bangor	947-5251	9	P
Blue Hill Harbor			
Kollegewidgwok Yacht Club	374-5581	9	M

MOUNT DESERT AND DOWN EAST

		VHF	
Bass Harbor			
Morris Yachts	244-5509	9	P
Red Fern Boat	667-1382	9	M
Up Harbor Marina	266-0270	9	P
Southwest Harbor			
Downeast Diesel and Marine	244-5145	9	P
Great Harbor Marina	244-0117	9	P
Hinckley Company	244-5572	9	P
Southwest Boat Marine Service	244-5525	9	P
Northeast Harbor			
Clifton Dock	276-3378	9	P
Town of Mount Desert	276-5737	9	P
Bar Harbor			
Bar Harbor Whale Watch	288-2386	9	P
Winter Harbor			
Winter Harbor Marine	963-7449	9	P
Machiasport/Bucks Harbor			
Town of Machiasport	255-4516	9	P

Produced By: Maine DEP, Tyson Drive, Augusta, ME

Phone: 207-287-7905
Fax: 207-287-3435
E-mail: pamela.d.parker@maine.gov
This publication funded in part with a grant from.

IF YOU HAVE QUESTIONS OR CORRECTIONS TO THIS GUIDE, PLEASE LET US KNOW: 207-287-7905 OR PAMELA.D.PARKER@MAINE.GOV

2008 Maine Pumpout Station Guide

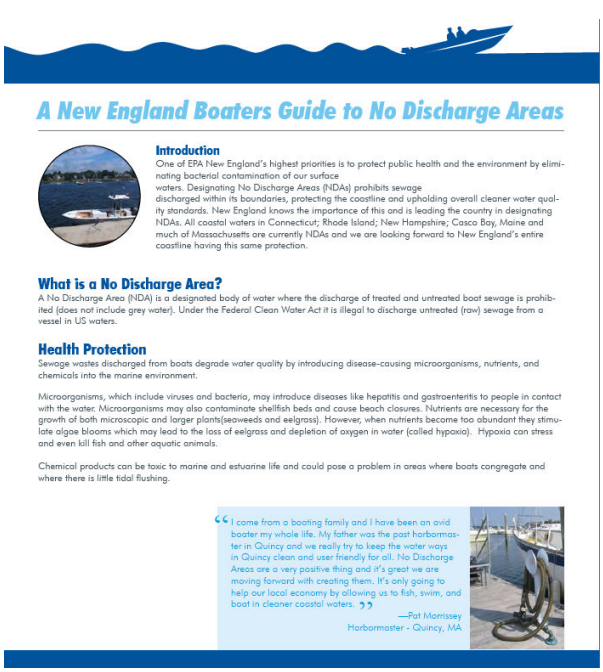
Use your head . . .
Pump it out.

If you find a malfunctioning pumpout station call: 207-287-7905

Key:

P = Public Pumpout Station $5 maximum charge
M = Pumpout Boat, get pumpout service at your mooring!
R = Reserved for customers only, charges vary.
Most commercial marinas are required to provide pumpout service to their customers. If you are refused service, call the number above immediately.

USEPA No Discharge Area Information Pamphlet



A New England Boaters Guide to No Discharge Areas

Introduction

One of EPA New England's highest priorities is to protect public health and the environment by eliminating bacterial contamination of our surface waters. Designating No Discharge Areas (NDAs) prohibits sewage discharged within its boundaries, protecting the coastline and upholding overall cleaner water quality standards. New England knows the importance of this and is leading the country in designating NDAs. All coastal waters in Connecticut; Rhode Island; New Hampshire; Casco Bay, Maine and much of Massachusetts are currently NDAs and we are looking forward to New England's entire coastline having this same protection.

What is a No Discharge Area?

A No Discharge Area (NDA) is a designated body of water where the discharge of treated and untreated boat sewage is prohibited (does not include grey water). Under the Federal Clean Water Act it is illegal to discharge untreated (raw) sewage from a vessel in US waters.

Health Protection

Sewage wastes discharged from boats degrade water quality by introducing disease-causing microorganisms, nutrients, and chemicals into the marine environment.

Microorganisms, which include viruses and bacteria, may introduce diseases like hepatitis and gastroenteritis to people in contact with the water. Microorganisms may also contaminate shellfish beds and cause beach closures. Nutrients are necessary for the growth of both microscopic and larger plants(seaweeds and eelgrass). However, when nutrients become too abundant they stimulate algae blooms which may lead to the loss of eelgrass and depletion of oxygen in water (called hypoxia). Hypoxia can stress and even kill fish and other aquatic animals.

Chemical products can be toxic to marine and estuarine life and could pose a problem in areas where boats congregate and where there is little tidal flushing.

"I come from a boating family and I have been an avid boater my whole life. My father was the past harbormaster in Quincy and we really try to keep the water ways in Quincy clean and user friendly for all. No Discharge Areas are a very positive thing and it's great we are moving forward with creating them. It's only going to help our local economy by allowing us to fish, swim, and boat in cleaner coastal waters."

—Pat Morrissey
Harbormaster - Quincy, MA

Marine Sanitation Devices (MSDs)... or Boat Toilets

Recreational boats are not required to be equipped with a toilet, but if they are, the Marine Sanitation Device (MSD) must be Coast Guard approved. The approved design requires the MSDs to hold sewage for shore-based disposal or treat the sewage prior to discharge. There are three types of MSDs:

TYPE I: MSDs discharge treated effluent having a fecal coliform bacterial count not greater than 1000 per 100 milliliters of water and no visible floating solids.

TYPE II: MSDs discharge treated effluent having a fecal coliform bacterial count less than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter.

TYPE III: MSDs are devices designed to store sewage (usually with disinfectants and deodorants added) until it can be pumped out at a pumpout facility or discharged outside the territorial sea boundary of three miles from shore. These are also known as holding tanks.

Boat Waste in a No Discharge Area

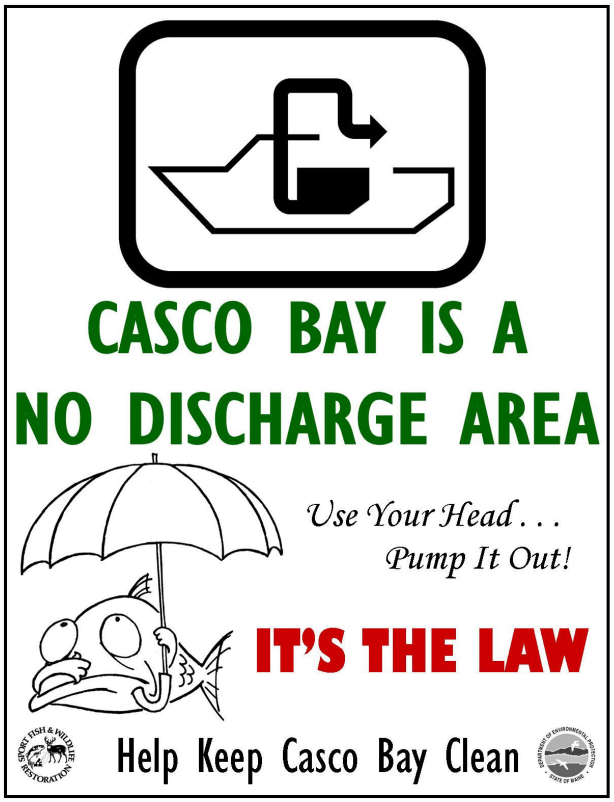
When operating in a No Discharge Area, Type I, Type II, and Type III Marine Sanitation Devices cannot be discharged. In No Discharge Areas, the US Coast Guard regulations state MSDs Type I and II must be secured to prevent discharge.

A Type I and Type II MSDs must be secured when operating in a No Discharge Area. This can be done by closing the seacock and padlocking it, using a non-releasable wire tie, locking the door handle lock or removing the seacock handle.

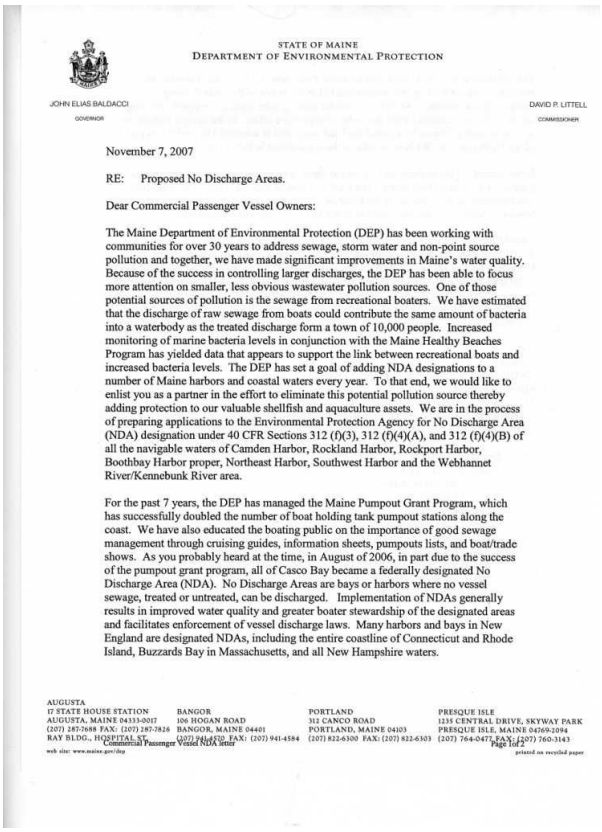
For More Information

www.epa.gov/region1/eco/nodiscrg

State Web sites
MA: www.mass.gov/czm/nda/pumpouts
NH: www.des.state.nh.us/wmb/cva/dir_map.htm
RI: www.dem.ri.gov/programs/benviron/water/shellfsh/pump
ME: www.maine.gov/dep/blwq/topic/vessel/nda
CT: www.ct.gov/dep/cwp/view.asp?a=2705&q=399328&depNav_GID=1620



Sample informational letters



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

November 7, 2007

RE: Proposed No Discharge Areas.

Dear Commercial Passenger Vessel Owners:

The Maine Department of Environmental Protection (DEP) has been working with communities for over 30 years to address sewage, storm water and non-point source pollution and together, we have made significant improvements in Maine's water quality. Because of the success in controlling larger discharges, the DEP has been able to focus more attention on smaller, less obvious wastewater pollution sources. One of those potential sources of pollution is the sewage from recreational boaters. We have estimated that the discharge of raw sewage from boats could contribute the same amount of bacteria into a waterbody as the treated discharge form a town of 10,000 people. Increased monitoring of marine bacteria levels in conjunction with the Maine Healthy Beaches Program has yielded data that appears to support the link between recreational boats and increased bacteria levels. The DEP has set a goal of adding NDA designations to a number of Maine harbors and coastal waters every year. To that end, we would like to enlist you as a partner in the effort to eliminate this potential pollution source thereby adding protection to our valuable shellfish and aquaculture assets. We are in the process of preparing applications to the Environmental Protection Agency for No Discharge Area (NDA) designation under 40 CFR Sections 312 (f)(3), 312 (f)(4)(A), and 312 (f)(4)(B) of all the navigable waters of Camden Harbor, Rockland Harbor, Rockport Harbor, Boothbay Harbor proper, Northeast Harbor, Southwest Harbor and the Webhannet River/Kennebunk River area.

For the past 7 years, the DEP has managed the Maine Pumpout Grant Program, which has successfully doubled the number of boat holding tank pumpout stations along the coast. We have also educated the boating public on the importance of good sewage management through cruising guides, information sheets, pumpouts lists, and boat/trade shows. As you probably heard at the time, in August of 2006, in part due to the success of the pumpout grant program, all of Casco Bay became a federally designated No Discharge Area (NDA). No Discharge Areas are bays or harbors where no vessel sewage, treated or untreated, can be discharged. Implementation of NDAs generally results in improved water quality and greater boater stewardship of the designated areas and facilitates enforcement of vessel discharge laws. Many harbors and bays in New England are designated NDAs, including the entire coastline of Connecticut and Rhode Island, Buzzards Bay in Massachusetts, and all New Hampshire waters.

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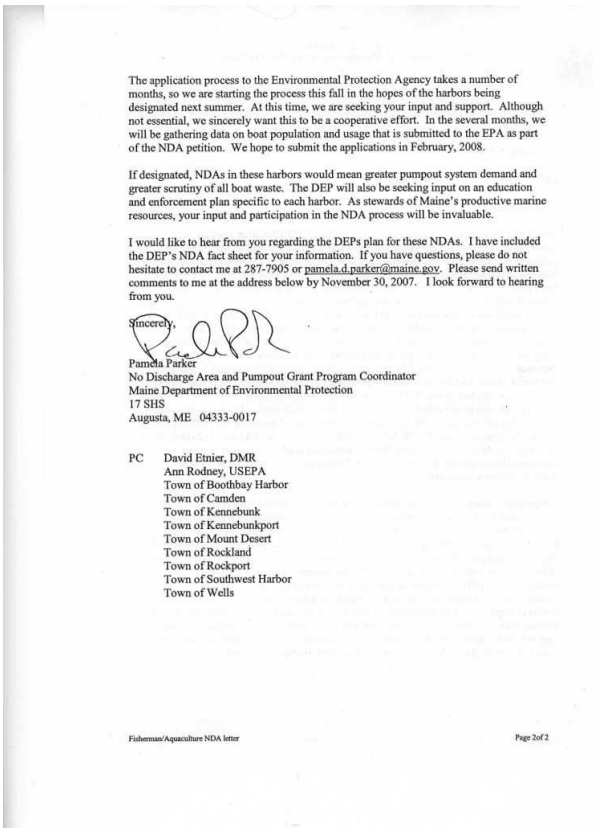
web site: www.maine.gov/dep

Commercial Passenger Vessel NDA letter
Page 1 of 2
printed on recycled paper



The application process to the Environmental Protection Agency takes a number of months, so we are starting the process this fall in the hopes of the harbors being designated next summer. At this time, we are seeking your input and support. Although not essential, we sincerely want this to be a cooperative effort. In the several months, we will be gathering data on boat population and usage that is submitted to the EPA as part of the NDA petition. We hope to submit the applications in February, 2008.

If designated, NDAs in these harbors would mean greater pumpout system demand and greater scrutiny of all boat waste. The DEP will also be seeking input on an education and enforcement plan specific to each harbor. As stewards of Maine's productive marine resources, your input and participation in the NDA process will be invaluable.

I would like to hear from you regarding the DEPs plan for these NDAs. I have included the DEP's NDA fact sheet for your information. If you have questions, please do not hesitate to contact me at 287-7905 or pamela.d.parker@maine.gov. Please send written comments to me at the address below by November 30, 2007. I look forward to hearing from you.

Sincerely,

Pamela Parker
No Discharge Area and Pumpout Grant Program Coordinator
Maine Department of Environmental Protection
17 SHS
Augusta, ME 04333-0017

PC David Etnier, DMR
Ann Rodney, USEPA
Town of Boothbay Harbor
Town of Camden
Town of Kennebunk
Town of Kennebunkport
Town of Mount Desert
Town of Rockland
Town of Rockport
Town of Southwest Harbor
Town of Wells

Fisherman/Aquaculture NDA letter
Page 2of 2

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

November 7, 2007

RE: Proposed No Discharge Areas.

Dear Fishermen:

The Maine Department of Environmental Protection (DEP) has been working with communities for over 30 years to address sewage, storm water and non-point source pollution and together, we have made significant improvements in Maine's water quality. Because of the success in controlling larger discharges, the DEP has been able to focus more attention on smaller, less obvious wastewater pollution sources. One of those potential sources of pollution is the sewage from recreational boaters. We have estimated that the discharge of raw sewage from boats could contribute the same amount of bacteria into a waterbody as the treated discharge form a town of 10,000 people. Increased monitoring of marine bacteria levels in conjunction with the Maine Healthy Beaches Program has yielded data that appears to support the link between recreational boats and increased bacteria levels. The DEP has set a goal of adding NDA designations to a number of Maine harbors and coastal waters every year. To that end, we would like to enlist you as a partner in the effort to eliminate this potential pollution source thereby adding protection to our valuable shellfish and aquaculture assets. We are in the process of preparing applications to the Environmental Protection Agency for No Discharge Area (NDA) designation under 40 CFR Sections 312 (f)(3), 312 (f)(4)(A), and 312 (f)(4)(B) of all the navigable waters of Camden Harbor, Rockland Harbor, Rockport Harbor, Boothbay Harbor proper, Northeast Harbor, Southwest Harbor and the Webhannet River/Kennebunk River area.

For the past 7 years, the DEP has managed the Maine Pumpout Grant Program, which has successfully doubled the number of boat holding tank pumpout stations along the coast. We have also educated the boating public on the importance of good sewage management through cruising guides, information sheets, pumpouts lists, and boat/trade shows. As you probably heard at the time, in August of 2006, in part due to the success of the pumpout grant program, all of Casco Bay became a federally designated No Discharge Area (NDA). No Discharge Areas are bays or harbors where no vessel sewage, treated or untreated, can be discharged. Implementation of NDAs generally results in improved water quality and greater boater stewardship of the designated areas and facilitates enforcement of vessel discharge laws. Many harbors and bays in New England are designated NDAs, including the entire coastline of Connecticut and Rhode Island, Buzzards Bay in Massachusetts, and all New Hampshire waters.

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web site: www.maine.gov/dep

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If designated, a NDA in your harbor would mean greater pumpout system demand. It will be essential for all pumpout station locations to maintain the pumpout stations well, and repair them promptly if they break. To this end, the DEP is pursuing a pilot program in Casco Bay that would provide pumpout station inspection and maintenance free of charge to the facility. If this program is successful for all involved, the DEP would pursue the same arrangement in all NDAs. The DEP will also be seeking input on an education and enforcement plan specific to your harbor.

I would like to hear from you regarding the DEPs plan for a NDA in your area. I have included the DEP's NDA fact sheet for your information. If you are interested in purchasing or upgrading a pumpout station, I am happy to send you out a grant application package. If you have questions, please do not hesitate to contact me at 287-7905 or pamela.d.parker@maine.gov. Please send written comments to me at the address below by November 30, 2007. I look forward to hearing from you.

Sincerely,

Pamela Parker
No Discharge Area and Pumpout Grant Program Coordinator
Maine Department of Environmental Protection
17 SHS
Augusta, ME 04333-0017

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Town of Boothbay Harbor
Town of Camden
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Town of Kennebunkport
Town of Mount Desert
Town of Rockland
Town of Rockport
Town of Southwest Harbor
Town of Wells

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

November 7, 2007

RE: Proposed No Discharge Area for your harbor.

Dear Boatyard or Marina:

The Maine Department of Environmental Protection (DEP) has been working with communities for over 30 years to address sewage, storm water and non-point source pollution and together, we have made significant improvements in Maine's water quality. Because of the success in controlling larger discharges, the DEP has been able to focus more attention on smaller, less obvious wastewater pollution sources. One of those potential sources of pollution is the sewage from recreational boaters. We have estimated that the discharge of raw sewage from one cruising boat could contribute the same amount of bacteria into a waterbody as the treated discharge form a town of 10,000 people. Increased monitoring of marine bacteria levels in conjunction with the Maine Healthy Beaches Program has yielded data that appears to support the link between recreational boats and increased bacteria levels. The DEP has set a goal of adding NDA designations to a number of Maine harbors and coastal waters every year. To that end, we would like to enlist you as a partner in the effort to eliminate this potential pollution source thereby adding protection to our valuable shellfish and recreational swimming assets. We are in the process of preparing applications to the Environmental Protection Agency for No Discharge Area (NDA) designation under 40 CFR Sections 312 (f)(3), 312 (f)(4)(A), and 312 (f)(4)(B) of all the navigable waters of Camden Harbor, Rockland Harbor, Rockport Harbor, Boothbay Harbor proper, Northeast Harbor, Southwest Harbor and the Webhannet River/Kennebunk River area.

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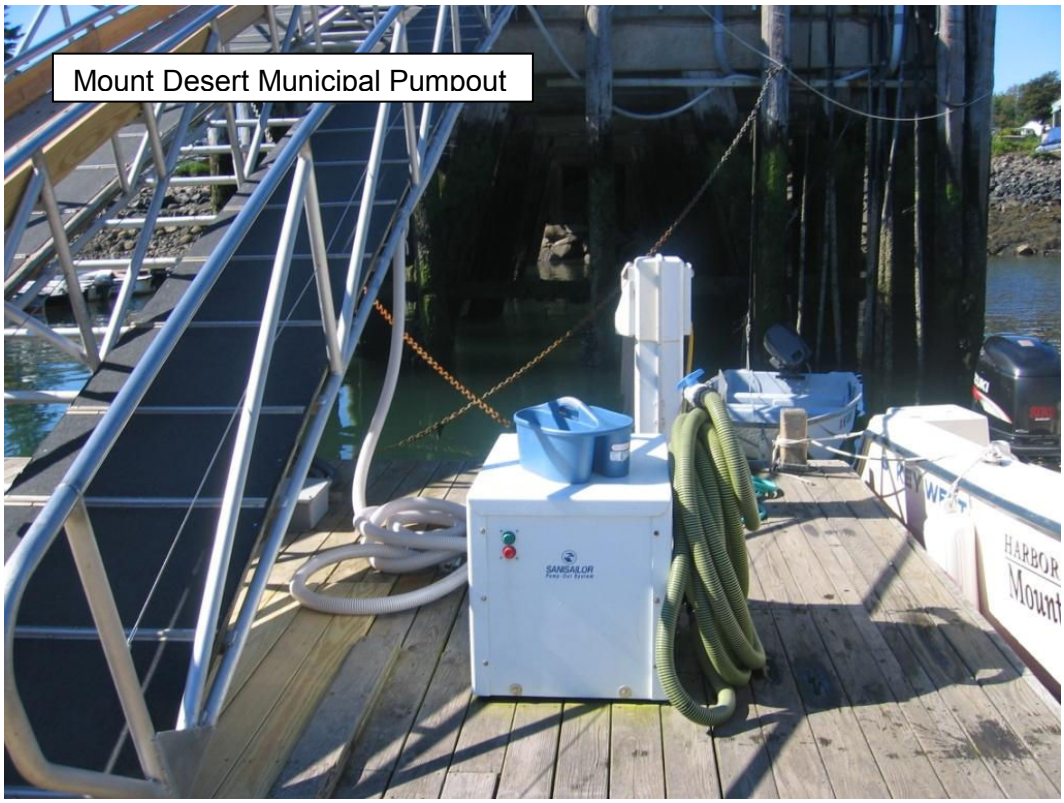
APPENDIX C
Pumpout Facility Photos




Great Harbor Marina Pumpout